Amendments to the Claims:

Please amend claim 74 and cancel claims 76-77. This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-73 (canceled)

74 (currently amended): A probe for laser desorption/ionization mass spectrometry, wherein the probe comprises at least one sample presenting surface and a moiety that binds to biotin immobilized by chemical bonding to the sample presenting surface, wherein the moiety on the sample presenting surface is bound to the biotin group of at least one biotinylated protein, and wherein the probe further comprises a matrix.

75 (previously presented): The probe of claim 74, wherein the moiety binds biotin with an affinity constant of $K_a = 10^{15}\ M^{-1}$.

76-77 (canceled)

78 (previously presented): The probe of claim 74, wherein the sample presenting surface comprises two or more moieties that bind to biotin arranged in a predetermined array.

79 (previously presented): The probe of claim 74, wherein the moiety that binds to biotin is selected from the group consisting of streptavidin and avidin.

80 (previously presented): The probe of claim 74, wherein the moiety is covalently bonded to the sample presenting surface.

81 (previously presented): A method comprising the steps of:

a) providing a probe comprising at least one sample presenting surface and a moiety that binds to biotin immobilized by chemical bonding to the sample presenting surface;

b) contacting the probe with at least one biotinylated protein under conditions allowing the biotin group to bind to the moiety that binds to biotin; and

c) performing laser desorption/ionization mass spectrometry on the proteins bound on the surface of the probe.

82 (previously presented): The method of claim 81, further comprising after step b) the step of:

washing to remove unbound molecules from the probe.

83 (previously presented): The method of claim 81, wherein the moiety binds biotin with an affinity constant of $K_a = 10^{15}\ M^{-1}$.

84 (previously presented): The method of claim 81, wherein the probe comprises two or more moieties that bind to biotin arranged in a predetermined array.

85 (previously presented): The method of any one of claims 81-84, wherein the moiety is covalently bonded to the sample presenting surface.

86 (previously presented): The method of any one of claims 81-84, further comprising the step of applying a matrix after allowing the biotin group to bind to the moiety that binds to biotin.

87 (previously presented): The method of any one of claims 81 or 82, wherein the moiety that binds to biotin is selected from the group consisting of streptavidin and avidin.

88 (previously presented): The method of claim 87, wherein the moiety is covalently bonded to the sample presenting surface.

89 (previously presented): The method of claim 87, further comprising the step of applying a matrix after allowing the biotin group to bind to the moiety that binds to biotin.

90 (previously presented): A mass spectrometry apparatus comprising:

a) a probe comprising at least one sample presenting surface and a moiety that binds to biotin immobilized by chemical bonding to the sample presenting surface;

b) an energy source that directs laser energy to the sample presenting surface for desorbing and ionizing a biotinylated protein captured by the moiety; and

c) a detector that detects the desorbed, ionized biotinylated protein.

91 (previously presented): The apparatus of claim 90, further comprising:

d) a spectrometer tube into which ionized biotinylated protein is accelerated; and

e) means for applying an accelerating electrical potential to the desorbed, ionized protein; wherein the mass spectrometer is a time-of-flight mass spectrometer.

92 (previously presented): The apparatus of claim 91, further comprising:

f) vacuum means for applying a vacuum to the interior of the tube.

93 (previously presented): The apparatus of claim 90, wherein the detector comprises an electron multiplier.

94 (previously presented): The apparatus of claim 90, wherein the moiety binds biotin with an affinity constant of $K_a = 10^{15}\ M^{-1}$.

95 (previously presented): The apparatus of claim 90, wherein the moiety on the probe is bound to the biotin group of at least one biotinylated protein.

96 (previously presented): The apparatus of claim 95, wherein the probe further comprises a matrix.

97 (previously presented): The apparatus of claim 90, wherein the probe comprises two or more moieties that bind to biotin arranged in a predetermined array.

98 (previously presented): The apparatus of claim 90, wherein the moiety that binds to biotin is selected from the group consisting of streptavidin and avidin.

99 (previously presented): The apparatus of claim 91, wherein the moiety that binds to biotin is selected from the group consisting of streptavidin and avidin.

100 (previously presented): The apparatus of claim 92, wherein the moiety that binds to biotin is selected from the group consisting of streptavidin and avidin.

101 (previously presented): The apparatus of claim 93, wherein the moiety that binds to biotin is selected from the group consisting of streptavidin and avidin.

102 (previously presented): The apparatus of claim 90, wherein the moiety is covalently bonded to the sample presenting surface.

103 (previously presented): The apparatus of claim 95, wherein the moiety is covalently bonded to the sample presenting surface.

104 (previously presented): The apparatus of claim 96, wherein the moiety is covalently bonded to the sample presenting surface.

105 (previously presented): The apparatus of claim 98, wherein the moiety is covalently bonded to the sample presenting surface.

106 (previously presented): The apparatus of claim 99, wherein the moiety is covalently bonded to the sample presenting surface.

107 (previously presented): The apparatus of claim 100, wherein the moiety is covalently bonded to the sample presenting surface.

108 (previously presented): The apparatus of claim 101, wherein the moiety is covalently bonded to the sample presenting surface.

109 (previously presented): The apparatus of claim 90, wherein the energy source is energy from a nitrogen laser or an Nd-YAG laser.